MT3060U-RN151-R

MiFi Drive, MT 3060 U
Firmware V2-D6 / Aux Processor V1-D6
(Radio: 20.2, Smart Agent: 22.4, App: 3.4)
for RoW and ANZ

Release Notes

Version 1.0

NOVATEL WIRELESS

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Overview

This document describes the software, hardware, and PRI changes to the MT 3060 U since firmware version V2 (first version used). The changes include the problems fixed, new features and improvements, and AT command updates by release version.

2

Release V2-D6

V2-D6 Radio
V2-D6 Smart Agent / Application Changes
V1-D6 Aux Processor

V2-D6 Radio

Resolved Issues

- None

New Features and Improvements

- None

AT Command Changes

- None

V2-D6 Smart Agent / Application Changes

Resolved Issues

- Fixed issue where MT 3060 does not attempt to retry if device fails a VIN resolve.
- Fixed issue where device was reporting the wrong OBD protocol upon waking up from low power sleep.
- Fixed issue where FOTA error codes were not being sent.
- Fixed issue where memory is corrupted when deleting event entries using AT$EVDEL and AT$EVDELR.
- Fixed issue where modem loses communication with the Aux Processor and the device freezes.
- Fixed issue where MT 3060 does not preserve calibration information after a power cycle.
- Fixed issue where MT 3060 set off alarms in BMW X-series vehicles.
- Fixed issue where OTA messages were sending out of sequence.
- Fixed issue where RTC stopped updating and required restart.
- Fixed issue with PAP protocol not working by adding negotiation steps for PPP authentication: CHAP -> PAP -> NO_AUTH.
- Fixed the issue where AT$FOTAFIN returns an incorrect or bad status.

New Features and Improvements

- Added AT commands and input and output events to allow ability to capture and process Diagnostic Trouble Codes (DTC) Freeze-Frame data used for providing vehicle prognostic information.
- Added ability for devices to be configured to report to NVTL Production Device Manager by default (factory default).
- Added AT command $LPMO that enables a new low power mode for the MT 3060 U modem, which can run while the Aux Processor is in deep sleep.
- Added new input event to allow sending of an OTA message ("last gasp") when a low battery level requires the device to be turned off.

AT Command Changes

The following AT commands were added or modified. Please refer to the *AT Command Reference* for the device for details.

- Added third parameter to AT$WAKEUP and AT$CHKIN to allow FOTA retry with Device Manager.

V1-D6 Aux Processor

Resolved Issues

- Fixed issue where modem loses communication with the Aux Processor and the device freezes.
- Fixed issue with RTC not being correct when device comes out of low-power mode.

New Features and Improvements

- Added ability to send “last gasp” OTA message when using internal battery and internal battery is ready to shut down due to low voltage.
- Added Diagnostic Trouble Codes (DTC) Freeze-Frame support.

AT Command Changes

- None

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Release V2-D5

V2-D5 Radio
V2-D5 Smart Agent / Application Changes
V1-D5 Aux Processor

V2-D5 Radio

Resolved Issues

- None

New Features and Improvements

- None

AT Command Changes

- None

V2-D5 Smart Agent / Application Changes

Resolved Issues

- Changed SVN to 9 for Type Approval.

New Features and Improvements

- None

AT Command Changes

- None

V1-D5 Aux Processor

Resolved Issues

- None

New Features and Improvements

- None

AT Command Changes

- None

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Release V2-D4

V2-D4 Radio
V2-D4 Smart Agent / Application Changes
V1-D5 Aux Processor

V2-D4 Radio

Resolved Issues

- None

New Features and Improvements

- None

AT Command Changes

- None

V2-D4 Smart Agent / Application Changes

Resolved Issues

- Fixed issue with first message being lost when coming out of low power mode.

New Features and Improvements

- None

AT Command Changes

- None

V1-D5 Aux Processor

Resolved Issues

- Fixed issue on device not performing wake on igintion correctly if AT$OBDDST=0.

New Features and Improvements

- None

AT Command Changes

- None

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Release V2-D3

V2-D3 Radio
V2-D3 Smart Agent / Application Changes
V1-D4 Aux Processor

V2-D3 Radio

Resolved Issues

- None

New Features and Improvements

- None

AT Command Changes

- None

V2-D3 Smart Agent / Application Changes

Resolved Issues

- Fixed issue with AT Command interpreter not working correctly after downgrading modem firmware to V2-D1.
- Fixed issue with AT$HBRST not working correctly.
- Fixed issue with AT$IDENT? giving invalid response.
- Fixed issue with AT$V returning error incorrectly.
- Fixed issue with device sending too many messages to VIN manager if ack not received.
- Fixed issue with reporting DTC codes too often when MIL indicator is set.
- Fixed issue with SMS not working reliably.
- Fixed issue with TCPAPI not reconnecting immediately after server port is available.

New Features and Improvements

- Added RPM report on legacy table 0,0.
- Added ability for device to auto-select APN (from configured list).
- Added ability to have 3 left and 3 right Y-axis thresholds for driver behavior.
- Added AT$CHKIN to allowable commands over SMS.
- Added AT$DNSDMP in support of DNS lookup feature.

AT Command Changes

The following AT commands were added or modified. Please refer to the *AT Command Reference* for the device for details.

- Added ability for device to auto select APN (from configured list). (AT$APNSEI, AT$PANSEN, AT$APNDGB)
- Added ability to have 3 left and 3 right Y-axis thresholds for driver behavior. (AT$DVBLAL, AT$DVBRAL)

V1-D4 Aux Processor

Resolved Issues

- Fixed issue with engine speed and vehicle speed not getting cleared on ignition off.
- Fixed issue with reading TTS and DTS on Cadillac.
- Fixed issue with impact event triggering being slow if FFS is full.
- Fixed issues with triggering impact detection.
- Fixed issue with missing messages on certain CAN protocols (9141-2 and 14230-2).

New Features and Improvements

- Added new UBI features:
  - Added ability to disable accelerometer filtering in UBI data.
  - Added HDOP and PDOP GPS into UBI OTA messages.
  - Added ability to send unfiltered UBI data.
- Added new Advanced Diagnostics features:
  - Added support for fuel level, tire pressure, battery voltage, and door control. (AD is a licensed/pay for feature. These features are not supported on all vehicles.)
  - Added support for odometer on Toyota (Advanced Diagnostic feature).
  - Added ability to expire AD feature.
- Improved message throttling to VIN manager if ack message not received.
- Added ability to rename file in FFS.
- Added feature to help with device interfering with native vehicle applications.
- Added 3 left and 3 right accelerometer thresholds.
- Added ability to send RPM data OTA (param3 table 1 bit 6).
- Expanded Impact Detection to be supported when ignition is off.
- Improved speed at which RTC time is restored after coming out of low power mode.

AT Command Changes

The following AT commands were added or modified. Please refer to the *AT Command Reference* for the device for details.

- Added AT$OBDONS to help with device not interfering with native systems.
- Fixed issue with AT$ACCAC? Returning error.
- Added AT$DVBRAL to allow right lateral accelerometer thresholds.
- Modified AT$DVBLAL to add left and added AT$DVBLAR for 3 right acceleration thresholds.
- Modified AT$DVBLAL to accommodate 3 left lateral accelerometer thresholds.
- Added AT$IMPDLY for support of impact detection for up to 30 minutes when ignition is off.

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Release V2-D2

V2-D2 Radio
V2-D2 Smart Agent / Application Changes
V1-D3 Aux Processor

V2-D2 Radio

Resolved Issues

- None

New Features-Improvements

- None

AT Command Changes

- None

V2-D2 Smart Agent / Application Changes

Resolved Issues

- Fixed issue AT$FOTAGET failing even when FTP file transfer was successful.
- Fixed issue with Check-in message buffering not allowing a deployment from DM.

New Features and Improvements

- None

AT Command Changes

- None

V1-D3 Aux Processor

Resolved Issues

- Fixed issue with RTC being incorrect after MT 3060 comes out of low power mode.
- Fixed issue with reading TTS and DTS values in several vehicles.
- Fixed issue with ignition off not being detected on the 2013 Mazda3 iTouring.

New Features and Improvements

- Added support for OEM action routines.
- Added support for Advanced Diagnostics action commands.
- Added the ability to report OBD tire pressure OTA.

AT Command Changes

- None

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Release V2-D1

V2-D1 Radio
V2-D1 Smart Agent / Application Changes
V1-D2 Aux Processor

V2-D1 Radio

Resolved Issues

- None

New Features and Improvements

- None

AT Command Changes

- None

V2-D1 Smart Agent / Application Changes

Resolved Issues

- Fixed issue with ambiguous AT$FOTAGET error when FTP fails.
- Fixed issue with AT$FOTAABT not always aborting FOTA.
- Fixed issue with FOTA hanging if FTP fails.
- Fixed issue with GPS drift causing fail two alerts.

New Features and Improvements

- Added new event timers (total of 32) (AT$EVTIMxx, AT$ETSAVxx).
- Added new status bit to wakeup to allow FOTA retry mechanism (AT$WAKEUP).
- Improved ignition on/off detect.

AT Command Changes

The following AT commands were added or modified. Please refer to the *AT Command Reference* for the device for details.

- Added new event timers (total of 32) (AT$EVTIMxx, AT$ETSAVxx).
- Added new status bit to wakeup to allow FOTA retry mechanism (AT$WAKEUP).

V1-D2 Aux Processor

Resolved Issues

- Fixed issue with ignition detect if OBD protocol is already detected and AT$OBDADT=0.

New Features and Improvements

- Improved reliability of reading vehicle voltage for determining ignition on/off state.

AT Command Changes

- None

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Release V2

V2 Radio
V2 Smart Agent / Application Changes

V2 Radio

Resolved Issues

- None

New Features

- None

AT Command Changes

- None

V2 Smart Agent / Application Changes

Resolved Issues

- Fixed issue with incorrect behavior of AT command sent over SMS when triggering an event using AT$EVTEST.
- Fixed issue with input event 52 (incoming SMS) not triggering after first SMS.
- Fixed issue with AT$GPSRST not resetting device.
- Fixed issue with FOTA not completing correctly and leaving modem in abnormal state.
- Fixed issue with output event 155 to allow buzzer to sound.
- Fixed issue with sending of SMS too slowly.
- Fixed issue with SMS getting stuck in SMS edit mode.
- Fixed an issue with MT 3060 resetting/locking up when getting GPS fix.
- Fixed issue with AT commands over SMS not accepting CMS password.
- Fixed issue with device not reporting to VIN Manager correctly.
- Fixed issue with FOTA status showing incorrectly in AT$FOTAGET?.
- Fixed issue with MT 3060 resetting if bits 27 or higher are used in param2.
- Fixed issue with MT 3060 failing FOTA upgrade.
- Fixed issue with multiple firing of input event 177 on power up.
- Fixed issue with UDPAPI commands not being executed properly.

New Features

- Added ability to disable GPS and use GLONASS only.
- Added battery level in param3 bank 1.
- Added support for auto calibration algorithm.
- Added support for UBI, 1 HZ and 10 Hz accelerometer data.
- UBI added speed and heading in 1 second packet; added number of satellites in 1 second packet; added VIN in 30 second packet.

AT Command Changes

The following AT commands were added or modified. Please refer to the *AT Command Reference* for the device for details.

- Added ability to output AT+CEER responses in numeric format.
- Added gap_time parameter to AT$IMPTHR command.
- Moved OBD Time To Service, Distance, and Freeze Frame to param3 bank 0.